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BRILLIANT GREEN AGAR

INTENDED USE:
A selective medium for the isolation of salmonellae, other than Salmonella typhi.

PRINCIPLE AND INTERPRETATION:
Brilliant Green Agar was first described as a selective isolation medium for Salmonella species by Kristensen et al. Kauffmann modified their formula to give a highly selective plating medium for the isolation and identification of salmonellae from faeces and other pathological material, and from food and dairy products. This medium was not designed for the isolation of Salmonella typhi or Shigella species and where these may be encountered, Brilliant Green Agar should be used in parallel with other selective plating media such as Desoxycholate Citrate Agar (Hynes) , Hektoen Enteric Agar, X.L.D.

The use of enrichment/selective broths prior to subculture on Brilliant Green Agar will improve the probability of isolating salmonellae. Tetrathionate Broth Base CM0029, Tetrathionate Broth, Selenite Broth Baseand Muller-Kauffmann Tetrathionate Broth Base may be used in conjunction with Brilliant Green Agar.

COMPOSITION:

Ingredients	Gr/Liter
Proteose peptone	10 gr
Yeast extract	3 gr
Lactose	10 gr
Sucrose	10 gr
Sodium chloride	5 gr
Phenol red	0,08 gr
Brilliant green	0,0125 gr
Agar	12 gr

***Formula adjusted, standardized to suit performance parameters

pH: 6,9 ± 0,2

PRECAUTIONS:
For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:
Examination of faeces, or similar material, for salmonellae:

1- Heavily inoculate a Brilliant Green Agar plate. At the same time, inoculate other plating media and tubes of Selenite Broth and Tetrathionate Broth.
2- Incubate the Brilliant Green Agar plate for 18-24 hours at 35°C.
3- Examine the plates and identify suspect colonies using differential tests for serological methods.
4- If no non-lactose fermenters are observed on the primary plate cultures, inoculate Brilliant Green Agar and other media with the enrichment cultures - then proceed as in point 3.

Examination of foods

1- Pre-enrich four 25g aliquots of food in 75ml of Buffered Peptone Water and incubate at 35°C for 4-6 hours.
2- Add to each sample 75ml of double-strength Selenite Cystine Broth and incubate at 43°C for 24 hours.
3- Subculture to plates of Brilliant Green Agar and Bismuth Sulphite Agar (Modified).
4- Incubate the plates at 35°C and examine the Brilliant Green Agar after 24 hours and the Bismuth Sulphite Agar after 48 hours.
5- Look for colonies with salmonella characteristics and confirm their identity with biochemical and serological tests.

QUALITY CONTROL:
1.Sterility Control:
Incubation 96 hours at 30-35°C: NO GROWTH

2.Phsical/Chemical Control
pH: 6,9 ± 0,2
Apperance: Green-brown coloured gel

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3.Microbiological Control: Incubation at 30-35 °C during 18-24 h

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Salmonella typhimurium ATCC 14028	10-100	Good growth	red coloured colonies: red medium
Escherichia coli ATCC 11775	100-1000	Inhibited or no growth	-

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

DISPOSAL:

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 02004
Packaging: Single wrap
Content: 10 plates/each package

REFERENCES:

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4. Downes and Ito (Ed.) Standard Methods for the Examination of Water and Wastewater,20th Ed APHA Washington D.C.
5. Osborn W. W. and Stokes J. L. (1955) Appl. Microbiol. 3. 295-301.
6. The United States Pharmacopaeia USP 28 2005.
7. Harvey R. W. S., Price T. H. and Hall L. M. (1973) J. Hyg. Camb. 71. 481-486.